

### REMARKS/ARGUMENTS

Favorable reconsideration of this application, as presently amended and in light of the following discussion, is respectfully requested.

Claims 1-24 are pending, with Claims 1, 7 and 13 amended and Claims 19-24 added by the present amendment.

In the Official Action, Claims 1-18 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Hitachi Koki Imaging Solutions, Inc. "The Internet Document Controller" (hereinafter "Hitachi") in view of Jenkins et al. (U.S. Patent No. 5,365,310, hereinafter "Jenkins").

Claims 1, 7 and 13 are amended cosmetically and to correct antecedent basis. New Claims 19-24 recite features described in Applicants' originally file specification.<sup>1</sup> No new matter is added.

Briefly recapitulating, Claim 1 is directed to:

A method of monitoring an image forming apparatus, comprising the steps of:

receiving, at a location which is remote from the image forming apparatus, a first parameter representing a condition of at least one part of said image forming apparatus;

storing said first parameter;

receiving, at the location which is remote from the image forming apparatus, a second parameter after at least one image forming operation is executed by the image forming apparatus, said second parameter representing said condition of said at least one part of said image forming apparatus;

comparing, at the location which is remote from the image forming apparatus, said received first and second parameters; and

controlling a display of said condition on a terminal that is remote from said image forming apparatus using a result of the comparing step.

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<sup>1</sup> Specification, Fig. 16E; paragraph 0052.

Claim 7 is directed to an image forming apparatus monitoring system including, *inter alia*, means for comparing, at the location which is remote from the image forming apparatus, said received first parameter and second parameter to form compared data.

Claim 13 is directed to an image forming device monitoring apparatus configured to monitor an image forming device which is remotely located including, *inter alia*, a comparison device configured to compare said received first parameter and second parameter to form compared data.

Hitachi describes an internet document controller that includes four modules: i-manage, i-service, i-billing, and i-print modules. Hitachi describes the i-service module as follows:

As the number of moving parts in a digital device decreases, service calls are increasingly related to non-hardware issues. An on-site service call is not only expensive for dealers who must utilize scarce technical resources, it disrupts your business workflow due to the downtime. The i-service module enables service technicians, using a standard web browser, to quickly access appropriate service documentation, remotely configure a copier/printer and run remote diagnostics for all the subsystem components via the Internet or a modem. Service logs for accounting data such as click counts, events like toner low, and copier/printer errors, can be downloaded on demand or emailed at specified times.

Unlike competing technologies, i-service goes well beyond remote diagnostics to remote repair. With i-service a technician can access your machine and make a number of electromechanical adjustments within minutes, without ever leaving his desk. The technician can also program the copier/printer to send error reports and early warning notifications for PMs and consumables replenishment by email or page, without user interaction, thus saving service costs while providing immediate customer satisfaction. Your productivity is improved and machine downtime is minimized.

On page 4 of Hitachi a user screen for the i-service module is displayed. The following six user warning services are displayed in this Figure:

- Preventative maintenance warning pages exceed [] - when this page count threshold is exceeded, a maintenance warning message is sent.

- Preventative maintenance pages exceed [] - when this page count threshold is exceeded, a maintenance needed message is sent.
- Error count exceeds [] - when engine errors have exceeded this number, a report is sent.
- Engine and jam error in last 1,000 pages exceed [] - when the engine and jam errors in the last 1,000 pages exceeds this number, a report is sent.
- Toner low - when the engine detects a Toner low condition, a report is sent.
- Stapler empty - when the engine detects a stapler empty condition, a report is sent.

The messages or reports sent by the i-service module may be sent either by email or by pager.

The Official Action asserts that Hitachi does not specify the location at which a comparison is performed. Applicants traverse this finding, as Hitachi is explicit in describing that the comparison is performed in the monitored image forming device, and not in the image device monitor. That is, the i-service module of Hitachi receives the result of a comparison performed by the image forming device (e.g., “Toner low - when the engine detects a Toner low condition, a report is sent;” and “Stapler empty - when the engine detects a stapler empty condition, a report is sent.”) The i-service module of Hitachi **downloads** on demand, or **receives** via email at specific times from the image forming device, service logs for accounting data such as click counts, events like toner low, and copier/printer errors. Using the i-service module of Hitachi, a technician can also program the copier/printer to **send** error reports and early warning notifications for [preventative maintenance] and consumables replenishment by email or page, without user interaction. In order for an image device to send error reports and consumable reports to the i-service module of Hitachi, the image forming device must compare the actual and threshold values ***within the image forming device itself***.

To address the question of remote comparison of parameters, the Official Action applies Jenkins. Jenkins describes a method for automating a copy quality defect repair process, and the ability to diagnose the problem before a service representative arrives at a customer's location.<sup>2</sup> In one embodiment, an operator located at a reprographic system 10 can transmit scanned images of both a document exhibiting a copy quality defect and a copy of an original document to a remote diagnostic computer 60. The remote diagnostic computer 60 can then compare the two images, and determine that the difference between the two is a copy quality defect. The two images may also be displayed at a remote site for review and analysis by a service representative.<sup>3</sup>

In *KSR Int'l Co. v. Teleflex Inc.*, 127 S. Ct. 1727, 1740 (2007), the Court noted

“In *United States v. Adams*, 383 U. S. 39, 40 (1966), a companion case to *Graham*, the Court considered the obviousness of a “wet battery” that varied from prior designs in two ways: It contained water, rather than the acids conventionally employed in storage batteries; and its electrodes were magnesium and cuprous chloride, rather than zinc and silver chloride. The Court recognized that when a patent claims a structure already known in the prior art that is altered by the mere substitution of one element for another known in the field, the combination must do more than yield a predictable result. 383 U. S., at 50–51. It nevertheless rejected the Government’s claim that Adams’s battery was obvious. The Court relied upon the corollary principle that *when the prior art teaches away from combining certain known elements, discovery of a successful means of combining them is more likely to be nonobvious*. *Id.*, at 51–52. When Adams designed his battery, the prior art warned that risks were involved in using the types of electrodes he employed. The fact that the elements worked together in an unexpected and fruitful manner supported the conclusion that Adams’s design was not obvious to those skilled in the art.”

Here, Hitachi explicitly describes that the comparison is not performed in the i–service module but is performed at the image forming device (e.g., “when the *engine* detects a Toner low condition, a report is sent.”) Clearly Hitachi was aware of remote monitoring concepts, as Hitachi is directed to remote monitoring of reports from the image forming

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<sup>2</sup> Jenkins column 2, lines 62-65.

<sup>3</sup> Jenkins column 7, lines 45-55.

device. However, despite this awareness, Hitachi explicitly describes that the comparison is not performed in the monitoring device, but in the monitored image forming device itself. Thus, Hitachi teaches away from the invention recited in Applicants' Claims 1, 7 and 13.

In KSR v. Teleflex (127 S. Ct. 1727, 1740 (2007)), the Court noted that "[u]nder the correct analysis, any need or problem known in the field of endeavor at the time of invention and addressed by the patent can provide a reason for combining the elements in the manner claimed." The Court also noted that "a person of ordinary skill has good reason to pursue the known options within his or her technical grasp. If this leads to the anticipated success, it is likely the product not of innovation but of ordinary skill and common sense. In that instance the fact that a combination was obvious to try might show that it was obvious under §103."

However, the Court went on to note that "rejections on obviousness grounds cannot be sustained by mere conclusory statements; instead, there must be some articulated reasoning with some *rational* underpinning to support the legal conclusion of obviousness."

Applicants submit that the Official Action provides an *irrational* reason, based on hindsight reasoning, for replacing the image device comparison means of Hitachi with the remote image comparison of Jenkins. That is, in view of Hitachi's explicit teaching away from remote comparison of parameters, there is no rational reason to replace the local parameter comparison means of Hitachi with the remote image comparison of Jenkins. Thus, Applicants request that the present rejection under 35 U.S.C. § 103(a) be withdrawn.

Furthermore, both Hitachi and Jenkins fail to disclose or suggest remotely monitoring and comparing a condition that is one of a temperature and a voltage as recited in new Claims 19-21, or a first parameter that is a parameter determined upon initialization of the image forming apparatus as recited in new Claims 22-24. Thus, for independent reasons, Applicants submit that Claims 19-24 are not obvious in view of the applied references.

Accordingly, in view of the present amendment and in light of the previous discussion, Applicants respectfully submit that the present application is in condition for allowance and respectfully request an early and favorable action to that effect.

Respectfully submitted,

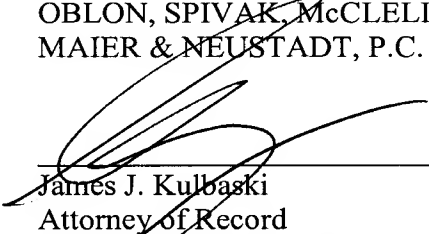
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